Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address:

Charles A. McLeod and Patsy A. Robbe-McLeod
2291 Bull Lake Rd
Troy, MT 59935

2. Type of action: Application for Beneficial Water Use Permit 76D 30149535

3. Water source name: Savage Lake

4. Location affected by project: Lot 8 & 9, Block 2, Falls View Subdivision, SWSENE, Section 28, Township 31N, Range 33W, Lincoln County, Montana.

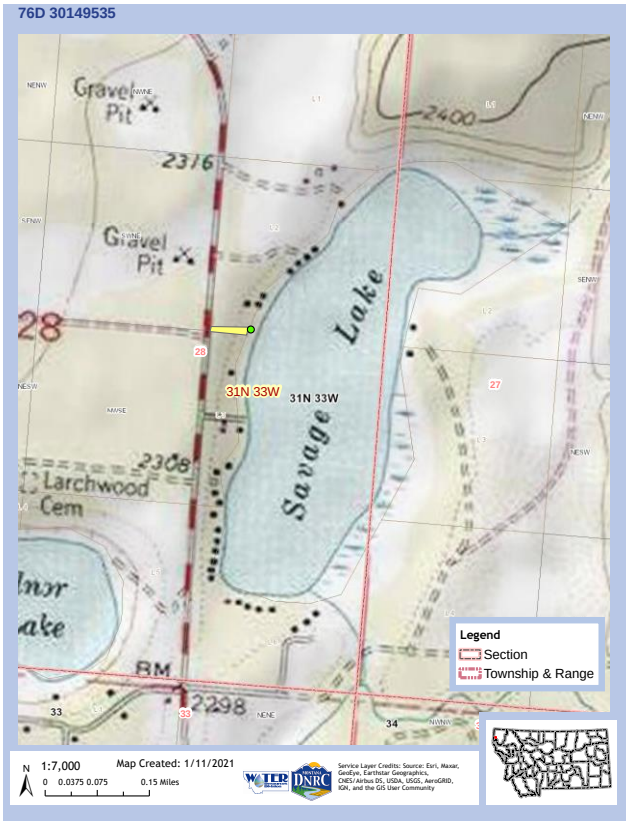

Figure 1: Map of the proposed place of use and point of diversion

5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

The Applicant proposes to divert and use water from Savage Lake by means of a pump, April 15th thru October 15th at a rate of 12 GPM up to 0.45 AF, from a point in Lot 8 & 9, Block 2, Falls View Subdivision, SWSENE, Section 28, Township 31N, Range 33W, Lincoln County, Montana for lawn and garden use. 0.25 acres will be irrigated. The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)

Montana Natural Heritage Program
Natural Resources and Conservation Service soil maps
Montana Department of Environmental Quality
United States Fish and Wildlife Wetland Mapper
Department of Fish, Wildlife and Parks

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

The source of water for the proposed project is Savage Lake, which has a surface area of approximately 92.5acres. The geology around the Lake consists of glacial lake deposits of unconsolidated silt interbedded with some sand and gravel. The Lake is not identified as being periodically or chronically dewatered.

Determination: No impact

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Savage Lake has not been assessed by the MTDEQ. No water quality impairment issues listed.

Determination: No impact

Groundwater **-** *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: Not applicable, application is for surface water.

DIVERSION WORKS **-** *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

The Applicant proposes to pump surface water from Savage Lake at a maximum rate of 12 GPM via a ¾ HP Flotec pump, model number FP4022. The pump will be located 15 feet from the lake shore, three feet below ground level and approximately three feet above average lake level in a covered excavated lined pit. Based on the supplied pump table, assuming 3-5 feet of lift (seasonal fluctuations in lake stage) the pump will produce 12 -10.5 GPM, respectively. Connected to the pump will be a one-inch diameter intake line that extends 20 feet into Savage Lake. The intake line will be buried below the bed of the lake. The end of the intake line will have a foot valve and inlet strainer and be secured to the bottom of the lake. The pump has a built-in pressure switch of 30 -50 psi. When pressure falls below 30 psi the pump will kick on. From the pump, water will travel uphill via a one-inch diameter poly pipe mainline into a 4.4-gallon pressurized water tank. The pressure tank will minimize pump cycling. The total length of poly pipe from the pump to the most distant hose bib is 137 feet. Two hose bibs and ¾ inch diameter garden hoses will provide water to each zone. Each zone will have three sprinklers (Rain Bird model P5R). Individually each sprinkler will output 3.5 GPM, each zone has a total output equal to 10.5 GPM (3 sprinklers × 3.5 GPM/sprinkler). Pump specifications were included in the application. Based on the total dynamic head (3 to 5 feet depending on lake stage) and pump specifications (40 psi output); the system can produce and distribute the requested flow rate of 12 GPM and volume of 0.45 AF annually for lawn and garden irrigation use.

Determination: No impact

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species **-** *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: The Montana Natural Heritage Program and DFWP websites were reviewed to determine if there are any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern", that could be impacted by the proposed project.

According to the Montana Natural Heritage Program in Township 31N, Range 33W the Geyer's Biscuitroot and Dwarf woolly-heads plants are listed as sensitive by the USFS.

The Canada Lynx, Grizzly Bear, and Bull Trout are listed as threatened the Wolverine, Canada Lynx, Hoary Bat, Peregrine Falcon, Harlequin Duck, Coeur d'Alene Salamander, Westslope

Cutthroat Trout and Columbia River Redband Trout are listed as sensitive by the USFS. An adequate quantity of water will still exist in surface water sources to maintain existing populations of aquatic species should they exist there currently. Human development has existed near this lake 20 plus years; any impacts to sensitive mammal species most likely has already occurred. No impact.

Wetlands *- Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: The property is not located within a designated wetland boundary.

Ponds *- For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: N/A

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: Soil within the proposed place of use is made up of silt loam and very fine sandy loam. Available water storage in the soil is low and the soil is classified as non-saline. The proposed use is not expected to degrade or significantly alter the soil profile.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: Private property and the property owner is responsible for spread of noxious weeds. No impact.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: No impacts are anticipated.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands*

Determination: N/A – project not located on State or Federal Lands.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: No other impacts were identified during this EA.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: No inconsistency noted.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: No impact expected.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: No impact expected.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No**XX** If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) Cultural uniqueness and diversity? None

(*b) Local and state tax base and tax revenues?* None

(c) Existing land uses? None

(*d) Quantity and distribution of employment?* None

(e) Distribution and density of population and housing? None

(f) Demands for government services? None

(g) Industrial and commercial activity? None

(h) Utilities? None

(i) Transportation? None

(j) Safety? None

(k) Other appropriate social and economic circumstances? None

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: None identified.

Cumulative Impacts: None identified.

3. *Describe any mitigation/stipulation measures:* None identified

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:* No reasonable alternatives identified.

PART III. Conclusion

1. Preferred Alternative: *None*

2 Comments and Responses: *None*

3. *Finding:*
*Yes___ No_**x**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:

An EA is the appropriate level of analysis for the proposed action because no significant impacts were identified.

Name of person(s) responsible for preparation of EA:

Name: Melissa Brickl
Title: Hydrologist/Water Resource Specialist
Date: January 13, 2021